

# Factors Affecting the Performance of Polytechnic Institutions in Sierra Leone

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**Abstract-** This study critically examined the factors affecting the performance of Polytechnic Institutions in Sierra Leone; the study takes in to considerations both internal and external factors hindering the performance of Polytechnic Institutions. There were 200 respondents drawn from four Polytechnic Institutions including males and females. Meanwhile, the study was preceded by a pilot study and specifically focusing on performance of Polytechnic Institutions. Questionnaire informed by instruments used in earlier studies Klass (2007) and Samuel (2008) were adapted and modified to suit the pilot study. A questionnaire constitutes questions on performance of Polytechnic Institutions and its effects on the educational standards in Sierra Leone. Results indicate that polytechnics are essentially paramount and contribute significantly to the sustenance of Sierra Leone's economy. The study found out that polytechnic Institutions performance is hindered by both internal and external factors.

**Index Terms-** Polytechnic, performance, education, institution, training and teaching

## I. INTRODUCTION

Polytechnic Institutions are part of the tertiary institutional network responsible for training of middle level manpower in Sierra Leone to fill in the vacuum currently existing within both private sectors and government parastatals. Polytechnic Institutions in Sierra Leone could be categorized based on their establishment : the first premier Polytechnic Institution established was the Milton Margai College of Education and Technology in 2001 and it comprises three Campuses; viz: Goderich Campus, Congo Cross and Brookfields Campus respectively. Furthermore, the Eastern Polytechnic and Freetown Polytechnic were also established in 2001. Meanwhile, the Freetown Polytechnic is yet to be fully functional whilst the Makeni Polytechnic and Port Loko Polytechni have now formed a merger to form the Ernest Bai Koroma University of Science and Technology.

Like all formal organisations, tertiary institutions of which polytechnics are part, it comprised a number of attributes such as: goals, technologies, programmes and courses. Oshagbemi (2000) argues "that the achievement of organisational goals is dependent on the availability of a qualified and competent work force". This view is reinforced by an Expert Group (EG 1998) when they assert that: "a highly skilled and motivated work force is essential to maintain globally competitive". The core

objectives of Polytechnics in Sierra Leone are to: train the middle level manpower with the necessary skills in Science, Technology, Engineering and Mathematics. The capacity of Polytechnics Institutions to fully meet the aforementioned objectives lies squarely on the quality and quantity of its workforce. Polytechnic Institutions were established as part of Sierra Leone's educational system to reduce the high rate of illiteracy and to make Tertiary Education more accessible to the huge quantum of youths waiting to be educated at the door-steps of the then few tertiary institutions.

There are currently Four regional polytechnics in Sierra Leone namely: Milton Margai College of Education and Technology, which is a premier, located out skirts of Freetown, Eastern Polytechnic, and located in the Eastern region of Sierra Leone in Kenema Town, Makeni and Port Loko Polytechnic Institutions (currently merged and formed Ernest Bai Koroma University of Science and Technology; EBKUST) Freetown Polytechnic, which is yet to be a functional Institution. Between 2001 and 2017, polytechnic institutions have increased their programmes, courses, campuses and staff strength. Furthermore, since the establishment of polytechnic institutions in 2001, there has been no significant research under taken to assess their impacts with respect to their roles and contributions to national development. Also, these polytechnics are plagued with both internal and external myriad of problems. Internally, lack of physical and infrastructural facilities, poor institutional management, low capacity building of staff, persistent industrial actions by Junior and Senior Academic Staff, and high staff turnover. Externally, inadequate funding; poor conditions of service for all categories of staff; negative public perception; under representation, academic progression of graduates, job placements of graduates and coupled with delay in payment of subvention and the high influence of national politics in the affairs of these Polytechnic Institutions. These external factors have caused a significant brain drain. Therefore, to maintain qualified workforce in the polytechnic institutions, there must be adequate support from the external bodies if polytechnics are expected to be successful. As a result of these inadequacies, polytechnics are experiencing a massive brain drain. For Allen (2002), "labour turnover mirrors the rate at which an employer gains or losses employees". The cost involving in replacing a trained, qualified and certified is not only financially challenging but also time consuming to address such situation.

The impact of turnover is strongly expressed by Guin (2004) as follows: "Attracting qualified people who do not stay

on the job is dysfunctional from the organisation's point of view because this kind of turnover uses up money, time and resources. Attracting unqualified people is costly because they have to be processed and ultimately rejected frequently resulting in their forming a negative impression of the organisation." A noticeable worrying trend is the fact that polytechnics invest training resources on employees only to lose them to other employers. Lochhead and Stephens (2004) assert that "when a business loses employees, it is not only robbed of skills and experiences but essentially its 'corporate memory". They further argue that, the scale and nature of staff losses is a critical management issue since its effect does not only affect productivity and profitability but extends to product and service quality. Replacing experienced work force with an inept work force affects considerably both the administration and trainees in the polytechnics. However, due to the massive brain drain in polytechnics, their sustainability is highly critical and threatened

## II. LITERATURE REVIEW

### 2.1. The Evolution of Polytechnic Education

The question of polytechnic education is closely connected to the problem of updating the relationship between general and vocational education. Although a specific form of polytechnic education, a form shaped by the given historical period as well as by the development of crafts, trade and a newly self-asserting social class, can be found in the works of J. A. Comenius during the late Renaissance, the phenomenon aggressively asserted its importance towards the end of the 19th century in connection with the growing industrialisation (S. Hessen, 1936). The earliest forms of polytechnic education can further be found in the works of J. Pestalozzi and the Philanthropist movement. The question of polytechnic education became even more acute after the First World War, in particular in relation to the reconstruction of national economies, but also in relation to the attempts to establish new economies in the USA and the former USSR (P. P. Blonskij, see Dýma, 1975). Any viable analysis of the work school as a concrete example of implementing the need for polytechnic education must further take into account the conception of Th. Litt (1958; see too F. Singule, 1992) who identifies experiencing, direct living-through, and the expression of real life as the characteristic features of the work school. The ideas of our predecessors concerning the definition of the term polytechnic education, ranging from the inclusion of handicraft activities to the transfer of class instruction to manufacturing facilities, stand much removed from our recent position. The questions connected with the concept of polytechnic education are thereby articulated on the level of creativity, although in the given concept of production, this represents only its elementary layer.

The idea of a productive school in Germany, but other countries back in the 90s of the last century, though other reasons are purely economic nature. It solves the issue of having enough skilled workers in technical fields and services. They talk about the so called dual education system, which is intended to reduce youth unemployment.

Theoretical training takes place in state and public educational institutions and provides practical training, including economically, businesses. The basic feature of the dual system is

that the student has a dual status – at the school has a pupil position, and at the company has concluded a contract of employment. Without polytechnic education, however, this system cannot do, because it assumes that students have a deeper relationship mastery of the technique, not only at the user level. This assumes recovery polytechnic education in the full breadth of that term in primary and lower secondary education (Pícl, 2014; MŠMT&NÚV, 2015)

Polytechnic education has become more topical in relation to the mass dissemination of digital technologies, their impact on human personality and social relations, but also in connection with the growing professionalization and intellectualisation of manufacturing processes, and the widening gap between humans and their physical environment. The digitalisation of society has further changed the traditional conception of industrial production. Traditional producers and working men have become lab technicians, specialised workers, assistants and employees in the sense of white-collar workers. Digitalisation influences socialisation and has thereby introduced a new dimension into social relationships precisely because these relationships can exist primarily as facilitated by digital technologies. On the other hand, digital technologies seem to provide more space for creativity; however, in reality, digital technologies in fact also limit and hinder creativity. Furthermore, this process sidelines physical and mental pre-dispositions for manual skills which in the past constituted the foundation of the ethnographic, folkloristic, and cultural heritage of a given society.

A polytechnic college by definition is an institution offering higher education in a wide spectrum of subjects which are predominantly technical in nature. In comparison to mainstream study, a polytechnic college aims more at applied aspects of education and less at the theoretical ones. A great majority of polytechnic colleges offer polytechnic diplomas and courses in vocational and technical subjects. One of the features of polytechnic education is the strong emphasis on practice-based learning. Work attachments with industry partners are part of the curriculum and can vary in duration from six weeks to six months or longer for selected courses. These work attachments will enable you to gain valuable on-the-job experience and provide you with opportunities to work with industry experts.

In addition to academic knowledge, the Polytechnics also emphasize the acquisition of certain important life skills. These are the key skills of communication and presentation as well as problem-solving skills. These are intended to develop the students' confidence and critical faculties which are necessary if they are to be effective participants in society. Students will also learn to develop original and creative thinking and to behave as responsible young adults

### 2.2. The importance of Polytechnic Institutions to National Development

Researchers agreed that for sustainable development to ensue in any country, it needs a diversified educational system (Bennell 1996); including technical education. Education enhances human capacities of the citizenry and thus increases the skilled workforce for rapid development. Dike (2009) argues that technical education is crucial to national development. There is growing awareness of the contributory potentials of technical

vocational educational training to national development (Tansen and Monzur 2012).

However, Colin (1999) contends that having a technical vocational educational system *per se* will not guarantee national development and prosperity unless it is backed up by sustainable funding, quality faculty and facilities. Likewise, Mustapha (2002) has observed that the global competitiveness of any nations is shaped by the quality of its workforce. Arguing, Bennell (1996) underscores the importance of technical education as it emphasis practical know-how and thus inculcates in learners practical knowledge, skills and other temperaments desirable for the world of work. Similarly, Akyepong (2002) identified technical vocational educational training as a tool for addressing the economic, political, socio-cultural stability of national development.

Globally, India has one of the largest stocks of quality technical human resources. Albeit, the number is disproportionate to its population (Goel 2007). India's technical education has benefited the nation in many ways. First, its vibrancy has not only made it an important global investment destination for multi-national companies, but it has opened up employment opportunities for nationals. For instance, Bloom (2002) claims that flowing from the investments of multinationals; the Bangalore city alone has created about 80,000 jobs. Individuals employed contribute revenue directly or indirectly to national development. Nations with strong technical education bring in its wake the generation of local and foreign exchange (FE) needed for economic growth. Also, training locally brings about savings in FE that would have been used to secure the services of expatriates.

### 2.3. Management of Polytechnic Institutions in Sierra Leone

All polytechnic **Institutions** in Sierra Leone are referred to as subvented institutions, this means government provide the required funding for the smooth running of all Institutions and determines what fees candidate must pay per programme. Polytechnic Institutions are manned by their respective Councils, who are charged and sole employing authorities and meet when deemed necessary. Each of these Polytechnic Institutions is headed by a Principal, Vice Principal, Registrar, Senior Finance Officer, Deans of Faculty, Heads of Department, In the case of the premier Polytechnic, Milton Margai College of Education and Technology that comprises three Campuses have Dean of Campus that manage the affairs of his/her Campus and report when and where necessary to administration during one of their several meetings. All of these Polytechnics have a Senior Staff Association charged with responsibility of seeking the welfare of its members and as a result, such academic staff is represented **on the Polytechnic Council Meeting by their Presidents**. The five associations have formed an umbrella association to consult with the appropriate authorities on staff matters.

## III. RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter intends to give a brief description on how the study was carried out. The chapter describes the area of study; population; sampling technique; and methods of data collection; the unit of inquiry investigated, research design and

research procedure used and also the methods of data analysis applied.

### 3.2. Research Type and Approach

Kothari (1990) says that there are two basic approaches to research, quantitative and qualitative approach. The researcher used both the qualitative and quantitative approaches to analyze the data collected.

The qualitative approach was used because the study was concerned with an assessment of the performance of Polytechnic Institutions in Sierra Leone. The aim was to find out reasons why Polytechnic Institutions behave the way they do. First the researchers tried to see why most Polytechnic Institutions are not performing better, then asked the Polytechnic Institutions concerned if they are aware of problems in their sister Polytechnic Institutions. In depth questions seeking open-ended answers were used to get direct to the point without guiding their views. This approach enabled the researchers to get insights and impressions as the conclusion from what answers were found. However, a quantitative approach was used seeking structured responses that could be summarized in numbers like averages and percentages. The researchers used the Statistical Package for Social Sciences (SPSS version 16) in analyzing the data collected.

### 3.3 Study Design and area of Study

The study is an assessment of the factors affecting the performance of Polytechnic Institutions in Sierra Leone. The researcher chose all the Four Polytechnic Institutions based in Sierra Leone because these educational institutions offering courses to meet the current market demand and constituted the highest populated institutions in Sierra Leone

### 3.4. Study population

#### 3.4.1. Population characteristics of Polytechnics

Two of the Polytechnics are based in Freetown with approximately academic staff strength of four hundred (400) and the other three with staff strength of two hundred (200) including male and female

### 3.5. Sampling Unit

The study targeted four geographical areas; North, South, East and Western Area which are all in Sierra Leone. The investigation involved academic staff and administration in these Polytechnic Institutions.

### 3.6. Variables and their Measurements

These Polytechnic Institutions were measured by adapting scales developed by the type of courses offered, duration, managerial competence and the Polytechnic itself. As a variable, the type of performance included delivery of lectures, academic staff attitude towards their work and performance of students in external examination. Managerial competence measurement was in terms of education levels and experience/ skills.

### 3.7. Sampling Procedure and Sample Design

The research considered the costs that would be incurred in the sampling analysis; namely cost of collecting data and the cost of an incorrect inference. This was done carefully by

selecting a sampling technique that would minimize both sampling errors and systematic bias. Sample design was taken by considering representation and element selection based on the nature of the population of the study, and problem definition, the sample designs tied to the non-sampling and require selection of Polytechnics. Therefore the researchers used a sampling for a fixed number of academic staff that was being sought from the Polytechnics.

### 3.8. Sample Size

The researcher surveyed Four Polytechnic Institutions and two hundred (200) academic staff were targeted Fifty (50) from each Polytechnics. The researchers considered this number as an optimum sample that fulfilled the requirements of effective and efficient representation, reliability and flexibility. The size of sample was achieved in consideration of cost and precision desired.

### 3.9. Sampling Technique

The study used a convenience sampling technique because the researchers wanted to reach the academic staff of these Polytechnic Institutions who are convenient or reachable to participate in the study. Thus, convenience sampling technique was the one feasible for the study.

### 3.10. Types and Sources of Data

This research included both primary and secondary data sources

#### 3.10.1. Primary Data

The researchers used interview, questionnaires and observation. The questionnaires were distributed to academic staff and administration, especially those who did not have enough time for interviews. The interviews were granted to heads of Polytechnic Institutions, Deans of Faculties and Campuses who had time. The observations were conducted to academic staff of these institutions that were too busy with daily activities or unwilling to cooperate with the researchers.

#### 3.10.2. Secondary Data

Secondary data in this research was obtained and gathered through Polytechnic documents, pamphlets, books, journals and other sources which were obtained from the library. More than one method of data collection method was used because there was no single method that claimed to offer convincing information.

#### 3.11.0 Data Collection Methods

Data collection methods used in this reward was observation, questionnaire and interview. This research design helped the researchers to get in-depth information relating to the topic in this study.

#### 3.11.1 Interview

The researcher interviewed several Deans and Heads of Department that didn't have time to respond to the questionnaires

#### 3.11.2 Observation

The researchers observed these Polytechnic Institutions when they were too busy with their activities; visited different Campuses, especially at the end of the term or semester so it can be observed how internal exams are conducted.

#### 3.11.3. Documentary

Different documents were reviewed, including Journals and several publications from UNESCO-TVETs section, library research and relevant books at the University of Sierra Leone, Fourah Bay College Campus.

#### 3.11.4. Questionnaires

About 200 questionnaires were distributed to specific academic and administrative staff that would surely return them back. The researchers used kind language, respect, and were member of staff to one of the Premier Polytechnics. All this made it possible for all the questionnaires to be answered.

### 3.12.0 Data Processing and Analysis

#### 3.12.1 Data Processing

Raw data are meaningful after being processed. The categorization and application of categories are done through coding, tabulation, drawing inferences which have been done by using Statistical Package for Social Science.

#### 3.12.2 Data Analysis

The researchers used the quantitative method of data analysis which aimed at determining relationship between variables of research data. All data collected have been organised and checked before they are presented and analysed to ensure completeness, accuracy, and validity. By completeness, it means all questionnaires were checked to see whether all questions have been answered and handed - over. Either, questions were checked if they are complete and the meaning corresponds to the data needed. By clarity, it means data were checked if they are correct and correspond to the question's requirements. By validity, data were checked in terms of time reported and if they conform to the objectives of the study. This has facilitated proper presentation in terms of tabulation, charts and graphs generation and computation of percentage and frequencies through SPSS version 16. Discussion and Analysis were done in accordance with percentage and frequencies generated and interpreted accordingly. By so doing, the researchers were able to discover whether data collected or information provided has been in alignment with the stated research objectives and questions. The method of data analysis was descriptive in most cases.

## IV. RESULTS AND DISCUSSIONS

In order to achieve the aim of this research, the researcher administered a structured questionnaire as the main data collection method. The questionnaire provided rich information derived from descriptions and explanations of events that occurred within a specific subject's environment. The researcher examined the interview data against the approaches and strategies referred to in the literature review. The analysis is in two sections; demography of respondents and research questions. Two hundred and fifty (250) questionnaires were administered,

only two hundred (200) were returned filled which makes 80% respondent rate.

**Table 1.Respondents per Polytechnic**

	Frequency	Percent
Milton Margai College of Education and Technology	85	42.5
Port Loko Teachers College	25	12.5
Eastern Polytechnic	40	20.0
Northern Polytechnic	30	15.0
Freetown Teachers College	20	10.0
Total	200	100.0

Table 1 from above reveals that, 42.5% of the respondents contacted are from Milton Margai College of Education and Technology, 12.5% from Port Loko Teachers College now a Campus of the Ernest Bai Koroma University, 20% from Eastern Polytechnic, 15% from Northern Polytechnic now a Campus of the Ernest Bai Koroma University and 10% from Freetown Teachers College. It can be concluded that majority of the respondents contacted were from Milton Margai College of Education and Technology, Reasons being that, it was the first Polytechnic established in Sierra Leone and comprise three (3) Campuses namely Goderich, Congo Cross and Brookfields

**Table 2.Gender of respondents**

	Frequency	Percent
Male	120	60.0
Female	80	40.0
Total	200	100.0

Table 2 from above reveals that 60% of the respondents contacted for this research are males and 40% are females. It can be concluded that majority of the respondents contacted were males as compared to their female counterpart. The reason being that most of the courses offered by these Polytechnics are engineering bias and as a result female lecturers are mostly found in departments like Languages, Education, Home Economics, Business Studies, Secretarial Studies, Catering Guidance and Counselling.

**Table 3.Age group of respondents**

	Frequency	Percent
18 years - 30 years	5	2.5
31 years - 43 years	40	20.0
44 years - 56 years	85	42.5
57 years - 69 years	60	30.0
70 years and above	10	5.0
Total	200	100.0

Table 3 from above reveals that 2.5% of the respondents contacted are within the age group between 18 years – 30 years, 20% are between 31 years – 43 years, 42.5% are between 44 years – 56 years, 30% are between 57 years – 69 years and 5% are within 70 years and above. It can be concluded that majority of the respondents are between 44 years – 56 years as compared to above 70 years. The reason being that, 70 years and above is being considered as retirement age and few of such lecturers are found in these Polytechnics.

**Table 4.Length of service**

	Frequency	Percent
1 year - 5 years	20	10.0
6 years - 10 years	40	20.0
11 years - 15 years	70	35.0
16 years - 20 years	60	30.0
21 years and above	10	5.0
Total	200	100.0

Table 4 from above reveals that 10% of the respondents contacted have worked with their Polytechnic between 1 year – 5 years,20% between 6 years – 10 years,35% between 11 years – 15 years,30% between 16 years – 20 years and 5% within 21 years and above. It can be concluded that majority of the respondents have worked between 11 years – 15 years as compared to above 21 years. The reason being that these Polytechnics were established from 2002 and those who have served over 21 years were working before the college was transformed into Polytechnic.

**Table 5.Educational background of respondents**

	Frequency	Percent
Below first degree	30	15.0
First degree	50	25.0
Master	90	45.0
Ph.D	10	5.0
Others	20	10.0
Total	200	100.0

Table 5 from above reveals that 15% of the respondents contacted are in the category of below first degree,25% are holders of first degree,45% are holders of master,5% are holders of Ph.D. and 20% are in the category of others such as holders of professional qualifications like ACCA.It can be concluded that majority of the respondents contacted were holders of master’s degrees as compared to Ph.Ds. The reasons being that,Ph.D courses cost are not easily affordable excepts through a scholarship schemes which are not easy to secure.Secondly,the duration and most courses are not offered in Universities in Sierra Leone .Thirdly, it is now becoming compulsory for any lecturer in the Polytechnic to be at least a master holder.

**Table 6.Current position held**

	Frequency	Percent
Principal	5	2.5
Vice Principal	5	2.5
Registrar	5	2.5
Deans of Faculty	20	10.0
Deans of Campus	5	2.5
Heads of Department	60	30.0
Heads of Unit	80	40.0
Exams Officer	5	2.5
Examination Task Force	5	2.5
Finance Officer	5	2.5
Others	5	2.5

	Frequency	Percent
Principal	5	2.5
Vice Principal	5	2.5
Registrar	5	2.5
Deans of Faculty	20	10.0
Deans of Campus	5	2.5
Heads of Department	60	30.0
Heads of Unit	80	40.0
Exams Officer	5	2.5
Examination Task Force	5	2.5
Finance Officer	5	2.5
Others	5	2.5
Total	200	100.0

Table 6 from above reveals that 2.5% of the respondents contacted are Principals, 2.5% are Vice Principals, 2.5% are Registrars, 10% are Deans of Faculty, 2.5% are Deans of Campus, 30% are Heads of Department, 40% are Heads of Unit, 5% are Exams Officers, 2.5% are Examination Task Officers, 2.5% are Finance Officers and 2.5% are others like Public Relation Officers, Estate Officers, Performance Contract Focal Persons, Procurement etc. It can be concluded that majority of the respondents contacted were Heads of unit .The reason being that there many Units under a Department.

**Table 7.Designation of respondents**

	Frequency	Percent
Below lecturer	25	12.5
Lecturer 1	30	15.0
Lecturer 2	70	35.0
Senior Lecturer	40	20.0
Principal Lecturer	20	10.0
Senior Principal Lecturer	15	7.5
Total	200	100.0

Table 7 from above reveals that 12.5% of the respondents contacted are below lecturer,15% are lecturer 1,35% are lecturer 2,20% are Senior Lecturers,10% are Principal Lecturers and 7.5% are Senior Principal Lecturers. It can be concluded that majority of the respondents contacted were in the category of Lecturer 2 as compared to Senior Principal. The reason being that promotions within these Polytechnics are now pegged to qualification, length of service and publications and most of those in the category of Lecturer 2 are staff that has no publication.

**Table 8. Approximate monthly salary**

	Frequency	Percent
Le 1,500,000 - Le 2,000,000	15	7.5
Le 2,500,000 - Le 3,000,000	65	32.5
Le 3,500,000 - Le 4,000,000	50	25.0
Le 4,500,000 - Le 5,000,000	30	15.0
Le 5,500,000 - Le 6,000,000	20	10.0
Le 6,500,00 - Le 7,000,000	10	5.0

Le 7,500,000 and above	10	5.0
Total	200	100.0

Table 8 from above reveals that 7.5. % of the respondents' contacted salary is between Le 1,500,000 – Le 2, 000, 000, 32.5% between Le 2,500,000 – Le 3,000,000,25% between Le 3,500,000 – Le 4,000,000 ,15% between Le 4,500,000 – Le 5,000,000,10% between Le 5.500,000 – Le 6.000.000,5% between Le 6,500,000 – Le 7,000,000,5% within Le 7,500.000 and above. It can be concluded that majority of the respondents contacted were within the salary bracket of Le 2,500,000 – Le 3,000,000 which means that comparing to the economic trends of things in the country this amount is inadequate and has a negative impact on the performance of staff in these Polytechnics.

**Table 9. Access to personal computer with internet facility**

	Frequency	Percent
Access with Internet	30	15.0
Access without Internet	70	35.0
No access	100	50.0
Total	200	100.0

Table 9 from above reveals that 15% of the respondents contacted have access to computer with Internet, 35% have access to computer without Internet and 50% have no access to computer. It can be concluded that majority of the respondents contacted have no access to computer and this can affect their level of performance. The reasons being, that the cost of laptop computers with internet facilities are relatively higher than the one month salary of some lecturers.

**Table 10. Publication**

	Frequency	Percent
None	140	70.0
1 - 5	35	17.5
6 - 10	20	10.0
11 and above	5	2.5
Total	200	100.0

Table 10 from above reveals that 70% of the respondents contacted have no publication, 17.5% has published between 1 – 5, 10% has published between 6 – 10 and 2.5% had published within 11 and above. It can be concluded that majority of the respondents contacted has no publication and the reason for this could be lack of interest, lack of knowledge and skills, cost of publication, inadequate support for publication from these Polytechnic authorities, the absence of recognised publication journals either in the country or the Polytechnics.

**Table 11. Professional Body**

	Frequency	Percent
None	140	70.0
Associate Member	30	15.0
Member	20	10.0
Fellow	10	5.0
Total	200	100.0

Table 11 from above reveals that 70% of the respondents contacted are not member of any professional body both at home and abroad, 15% are Associate Members, 10% are Members and 5% are Fellows. It can be concluded that majority of the respondents contacted were not member of any professional body. The reasons are associated with yearly subscription and their perception about the benefits one will derive from being a member of a professional body. This makes them not fully aware of latest development with the industries they found themselves.



**Table 12. Internal problem**

	Frequency	Percent
Inadequate funds	40	20.0
Inadequate learning and teaching materials/equipment	30	15.0
Inadequate accommodation and other facilities	30	15.0
Poor institutional management	50	25.0
Slow capacity building	20	10.0
Weak linkage with outside institutions	10	5.0
Corruption	5	2.5
Unattractive courses	15	7.5
Total	200	100.0

Table 12 from above reveals that 20% of the respondents contacted on internal problem indicated inadequate funds either from government or internally generated, 15% indicated inadequate learning and teaching materials/equipment, 15% indicated inadequate accommodation and other facilities, 25% indicated poor institutional management, 10% indicated slow capacity building, 5% indicated weak linkage with outside institutions, 2.5% indicated corruption and 7.5% indicated unattractive courses. It can be concluded that majority of the respondents indicated poor institutional management such as recruitment process of staff, putting their personal interest over the institution, putting square pegs in round holes, mismanagement of funds generated internal and from government, transparency and accountability, favouritism, wrong decision making and failing to address issues and targeting individuals etc.

**Table 13. External problem**

	Frequency	Percent
Inadequate fund from government	80	40.0
Delay in payment of salary	50	25.0
Political interference into Polytechnic management	40	20.0
Conditions of Service	30	15.0
Total	200	100.0

Table 13 from above reveals that 40% of the respondents contacted on external problem indicated inadequate fund from government, 25% indicated delay in payment of salary, 20% indicated political interference into Polytechnic management and 15% indicated Conditions of Service. It can be concluded that majority of the respondents indicated inadequate fund from government. The reason being that the money allocated to these Polytechnics is small and not paid on time. As a result they are unable to construct or rehabilitate building, purchase adequate furniture, under take developmental projects etc.

**Table 14. Negative impact on the Polytechnic**

	Frequency	Percent
Internal conflicts	60	30.0
Poor service delivery	70	35.0
Bad public image	30	15.0
High level of malpractices	40	20.0
Total	200	100.0

Table 14 from above reveals that 30% of the respondents contacted on the negative impact on the Polytechnic indicated internal conflicts, 35% indicated poor service delivery, 15% indicated bad public image and 20% indicated high level of malpractices. It is apparent that poor service delivery is one of the major causes of the negative impacts on the polytechnics. Polytechnics are limited in their activities due to the above highlighted problems

**Table 15. Negative impact on graduates**

	Frequency	Percent
Struggle to acquire knowledge/skills	70	35.0
Difficult job placement	30	15.0
Academic progression becomes difficult	40	20.0
Incompetence	60	30.0
Total	200	100.0

Table 15 from above reveals that 35% of the respondents contacted on the impact on graduates indicated struggle to acquire knowledge and skills, 15% indicated difficult job placement, 20% indicated academic progression becomes difficult and 30% indicated incompetence. It can be concluded that majority of the respondents indicated struggle to acquire knowledge and skills. The reason being due to the above highlighted problems graduates are now finding it difficult to understand simple concept or demonstrate simple practical due to the lack of facilities

**Table 16. Negative impact on the country**

	Frequency	Percent
Under development	70	35.0
Hiring of expatriates	40	20.0
Unemployment	60	30.0
Others	30	15.0
Total	200	100.0

Table 16 from above reveals that 35% of the respondents contacted on the negative impact on the country indicated under development, hiring of expatriates, 30% indicated unemployment and 15% indicated others such as high dependency rate on families and government, the increase of social evils etc. It can be concluded that majority of the respondents indicated under development, the reason being that the rate of the country development is hinged on its middle level man power

performance of these Polytechnic Institutions in Sierra Leone. The researchers are of the view that there are other internal factors that are critically crucial to their performance such as competence of staff, development of their capacity and many other factors therefore need to be addressed in future research. Polytechnic Institutions should therefore be committed and willing to develop strategies that will enhance their performance.

**V. CONCLUSION**

In this research work, an attempt was made to identify factors that affect the performance of Polytechnic Institutions in Sierra Leone. The researchers focused on both internal and external factors and noticed that they are crucial in producing skills manpower for national development. Even though analysis of the data using descriptive statistics proved that: no access to laptop computers with internet facilities, inadequate funds, poor institutional management, inadequate learning and teaching materials/equipment, inadequate accommodations and other facilities, delay in payment of salary and political interference into Polytechnic Institutions management are found to affect the

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